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FLIGHT ENGINEER CAREER LADDER AFSC'S 11330A/C, 11350A/C, 11370A--ETC(U)
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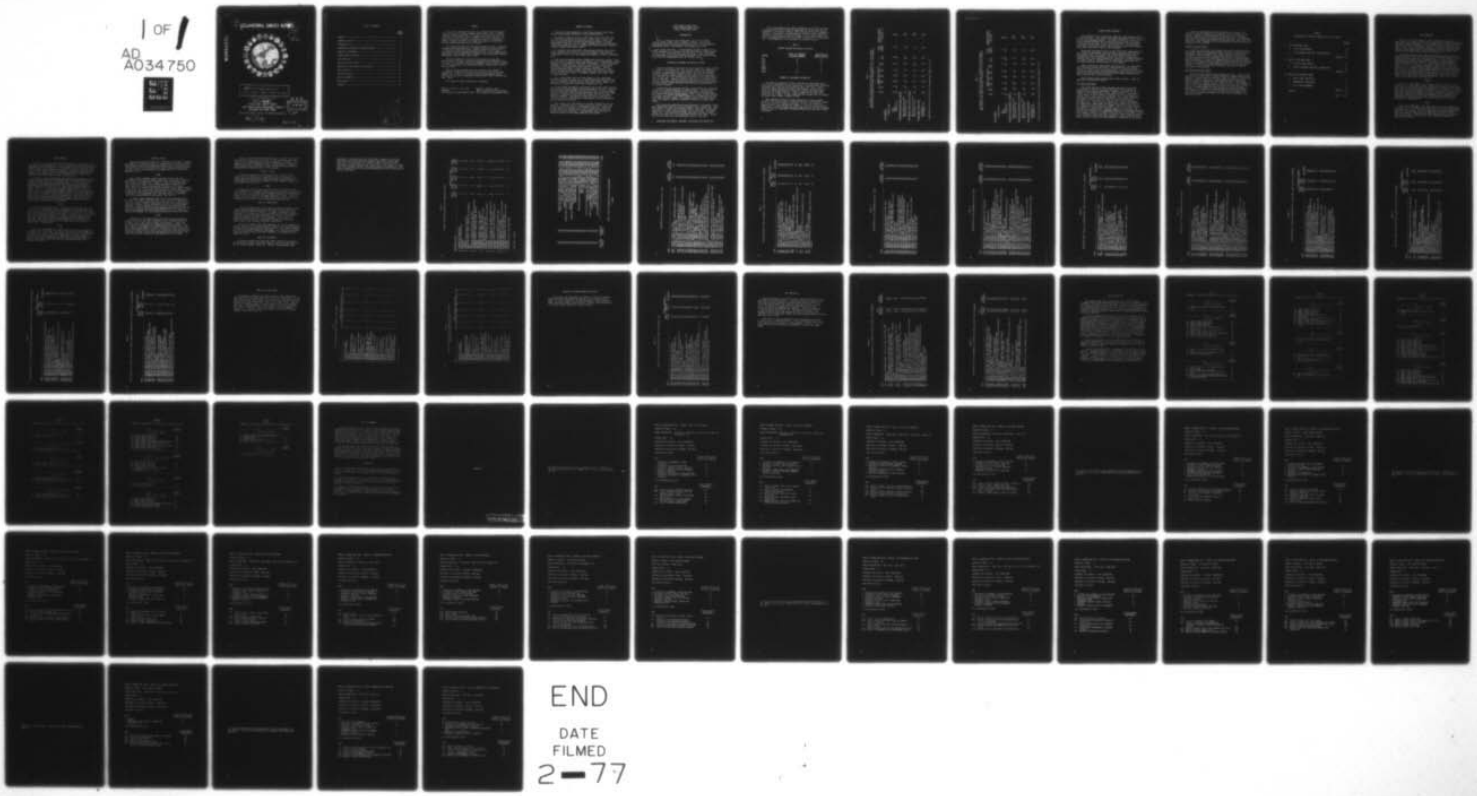

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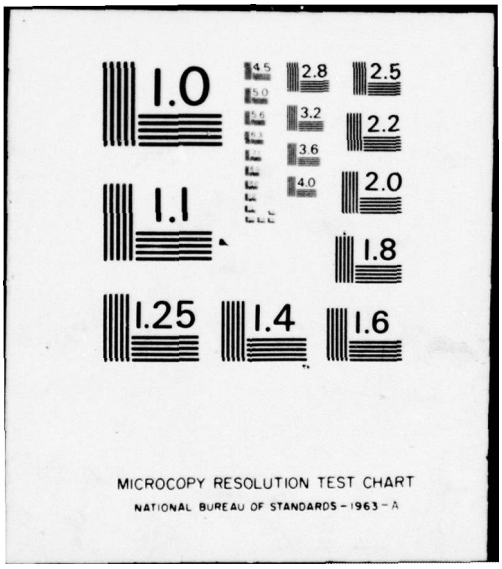
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OCCUPATIONAL SURVEY REPORT.

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(6) FLIGHT ENGINEER CAREER LADDER

AFSC'S 11330A/C, 11350A/C, 11370A/C AND 11390.

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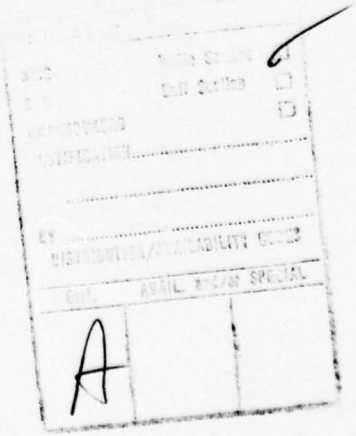

PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Flight Engineer career ladder, AFSC's 11330A/C, 11350A/C, 11370A/C and 11390. The project was directed by USAF Program Technical Training, Volume 2, dated 1 July 1974. Authority for conducting specialty surveys is contained in AFM 35-2, paragraph 2-1. Computer outputs from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by Captain Philip C. Bressler, Inventory Development Specialist. Captain Bressler and Major Stanley D. Stephenson analyzed the survey data and wrote the final report. This report has been reviewed and approved by M.. Vahn N. Adams, Chief, Maintenance Career Ladders Analysis Section, USAF Occupational Measurement Center, Lackland AFB, Texas 78236.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Because volume reproduction of this report is not feasible, distribution is made on a loan basis to air staff sections and major commands upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

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SUMMARY OF RESULTS

1. There were 1,439 respondents to the flight engineer survey representing approximately 55 percent of the assigned manning.

2. Personnel assigned to the AFS 113X0 career ladder find their job far more interesting than do personnel in other career fields. They also perceive that their talents and training are better utilized. Reenlistment intentions are also higher although there is a noticeable difference between the A and C shredout with 113X0A personnel (propellor) showing a higher reenlistment intent.

3. On a general level most DAFSC 113X0 personnel perform very similar tasks, regardless of aircraft or unit of assignment. They perform a large number of tasks, but they spend small amounts of time on individual tasks.

4. Career field structure analysis showed three functional groups. These were (a) C130; (b) C5/C141 and (c) non-flying. The C130 and C5/C141 groups accounted for 87 percent of the career field members. Tasks performed by personnel in these two group tend to be very similar with the group differences being based on aircraft-specific equipment. The non-flying group consisted of a small percentage (four percent) of personnel assigned to either command level staff positions or as instructors at the ATC basic course. In general, however, the career field is highly uniform.

5. Time in the career field has little impact on tasks performed. Personnel with over 15 years in the career field do primarily the same tasks as incumbents with two years in the career field. However, the performance of supervisory tasks does increase over time.

6. The AFS 113X0C STS contains 35 sections, only nine of which involve tasks knowledge or performance training provided by the basic course at Sheppard AFB (113X0A personnel receive all of their training from MAC at Little Rock AFB). MAC aircraft proficiency training for the 113X0C shredout is conducted at Altus AFB and includes most of the tasks taught at Sheppard. Consideration should be given to combining all C shred training at Altus AFB due to the present training overlap and the availability of aircraft.

7. There seems to be a discrepancy in training provided for the two shredouts. Personnel with a C shred attend both the ATC school and the MAC school for a total of 16-18 weeks of training. Those with A shred attend just the MAC school for six weeks and receive only minimal training in many areas. Consideration should be given to expanding the entire training program for the A shreds.

OCCUPATIONAL SURVEY REPORT
FLIGHT ENGINEER CAREER LADDER
AFSCS 113X0A AND 113X0C

INTRODUCTION

This is a report of the occupational survey of the Flight Engineer Career Ladder, AFSC's 11330A/C, 11350A/C, 11370A/C and 11390, conducted by the Occupational Survey Branch, USAF Occupational Measurement Center, from November 1974 through August 1976.

The report describes: (1) development and administration of the survey instrument; (2) summaries of tasks performed by airmen grouped by skill level, experience level and similarity of tasks performed; (3) comparisons with current training and career field structure documents; and (4) recommended actions for further study.

INVENTORY DEVELOPMENT AND ADMINISTRATION

The data collection instrument for the occupational survey was USAF Job Inventory AFPT 90-435-181. The inventory booklet was composed of two parts: a background information section in which job incumbents provided information about themselves; and a duty-task list section which assessed the relative amount of time spent on tasks performed in their current jobs. The latter section consisted of 704 tasks grouped under 21 headings. Thorough research of publications and directives, personal interviews with subject-matter specialists and written reviews from experienced 113X0A/C personnel contributed to the development of the survey instrument.

Consolidated base personnel offices in operational units worldwide received the inventory booklets for administration. Survey administration occurred during November 1975 through March 1976 based upon the October 1975 Uniform Airman Record. Table 1 gives the distribution of assigned personnel in the career ladder as of December 1975 and the percentage, by major command, of inventory booklets returned from the field. The number of booklets represents 55 percent of career ladder members.

After supplying identification and biographical information, incumbents checked and rated the tasks performed in their current job. Tasks were rated on a 9-point scale showing relative time spent on each task compared to all other tasks performed in the current job. The rating ranged from 1 (very-much-below-average time spent) through 5 (about-average time spent) to 9 (very-much-above-average time spent). Respondents did not rate tasks not performed in their current job.

In the development of the survey instrument, every effort was made to include all duties and tasks of importance to the accuracy and completeness of the survey. However, due to the possibility of inadvertent omissions, instructions for completing the inventory urged respondents to write in any duties or tasks not listed. In this survey many of the write-in comments were related to training for personnel in 113X0A shredout. These comments will be discussed in a separate section.

TABLE 1

PERCENT ASSIGNED AND SAMPLED BY MAJCOM

MAJCOM	PERCENT OF PERSONNEL ASSIGNED COMMAND	PERCENTAGE OF SAMPLE SURVEYED
MAC	83	91
AFSC	1	2
TAC	2	2
ADC	1	1
AFLC	1	1
PACAF	1	1
ATC	1	1
OTHER	10	1

SUMMARY OF BACKGROUND INFORMATION

Each USAF job inventory contains a section for background data in which survey respondents provide biographical information about themselves and report their feelings and perceptions about their jobs. Table 2 summarizes background data relative to job interest, perceived utilization of talent, perceived utilization of training and reenlistment intentions for 113X0A personnel. Table 3 summarizes the same information for the 113X0Cs. In both tables the last column gives the average for other career ladders surveyed in 1975.

When compared to other Air Force specialties, flight engineers obviously find their job more interesting and perceive that their talents and training are well matched to the job. In fact, the difference between the Air Force average and 113X0A/C is striking on these factors. Reenlistment intention figures are also higher than the Air Force average; however, there is a noticeable difference between the A and the C shreds percentages.

TABLE 2

JOB INTEREST, UTILIZATION OF TALENTS, TRAINING AND REENLISTMENT INTENTION BY AFMS GROUPS (PERCENT RESPONDING) FOR 113X0A PERSONNEL

	MONTHS IN SPECIALTY							TOTAL 113X0A SAMPLE	COMBINED CAREER LADDERS SURVEYED IN 1975
	2-24	25-48	49-96	97-144	145-192	193-240	240+		
JOB INTEREST									
I FIND MY JOB									
DULL	5	3	3	3	4	8	0	4	16
SO-SO	3	3	10	5	4	0	14	5	15
INTERESTING	92	94	87	92	92	92	86	91	69
PERCEIVED UTILIZATION OF TALENTS									
NOT AT ALL/VERY LITTLE	3	0	9	6	7	8	0	5	26*
BETTER/FAIRLY WELL	97	100	91	94	93	92	100	95	74*
PERCEIVED UTILIZATION OF TRAINING									
NOT AT ALL/VERY LITTLE	4	0	8	7	11	0	14	7	26*
BETTER/FAIRLY WELL	96	100	92	93	89	100	86	93	74*
REENLISTMENT INTENTIONS									
NO/PROBABLY NO	15	9	18	28	26	25	43	22	45
YES/PROBABLY YES	85	91	82	72	74	75	67	78	55

* DATA ON UTILIZATION OF TALENTS AND TRAINING WAS COMBINED IN 1975

TABLE 3

JOB INTEREST, UTILIZATION OF TALENTS, TRAINING AND REENLISTMENT INTENTION BY AFMS GROUPS (PERCENT RESPONDING) FOR 113XOC PERSONNEL

	MONTHS IN SPECIALTY							TOTAL 113XOC SAMPLE	COMBINED CAREER LADDERS SURVEYED IN 1975
	2-24	25-48	49-96	97-144	145-192	193-240	240+		
JOB INTEREST									
I FIND MY JOB									
DULL	0	0	3	2	5	3	0	3	16
SO-SO	1	0	3	4	5	1	0	3	15
INTERESTING	99	100	94	94	90	91	100	94	69
PERCEIVED UTILIZATION OF TALENTS									
NOT AT ALL/VERY LITTLE	8	0	18	4	3	3	0	9	26*
BETTER/FAIRLY WELL	92	100	82	96	97	97	0	91	74*
PERCEIVED UTILIZATION OF TRAINING									
NOT AT ALL/VERY LITTLE	2	0	2	3	8	3	0	3	26*
BETTER/FAIRLY WELL	98	100	98	97	92	97	100	97	74*
REENLISTMENT INTENTIONS									
NO/PROBABLY NO	10	11	22	36	30	36	41	36	45
YES/PROBABLY YES	90	89	78	64	70	64	59	64	55

* DATA ON UTILIZATION OF TALENTS AND TRAINING WAS COMBINED IN 1975

CAREER LADDER STRUCTURE

The structure of the 113X0 career ladder was analyzed on the basis of task similarity. This analysis was done independent of DAFSC, aircraft, or any other background factors. The analysis consisted of a hierarchical grouping procedure which identified those personnel who tended to perform the same tasks in their daily activities. These personnel were placed in the same clusters, and then these clusters were compared using other known data to verify their uniqueness.

There were three major results of the 113X0 career ladder analysis: (a) at least on the general level most DAFSC 113X0 personnel perform very similar tasks; (b) aircraft type is the dominant factor that differentiates task performance; C5A and C141 Flight Engineers group together while C130 Flight Engineers are contained in a separate cluster; (c) a small group of incumbents in the 113X0 career ladder have jobs distinctly different from the typical Flight Engineer.

Table 4 present the 113X0 career field structure. As noted above, three functional groups were found. These three functional groups contain 91 percent of the 113X0 career field. The remaining nine percent of the survey sample included members whose jobs were not associated with any of the major groups and who shared no common characteristics. These "isolates" will not be discussed.

Each functional group contains two or more job types. These job types will be discussed in detail.

C130 Functional Group

This group consists of those personnel who perform the normal flying duties in the C130 and those who either train, examine, or evaluate flight engineer performance. Generally speaking, all the members of this group perform a large number of tasks. The result is a small amount of time allocated to any one task but high degree of overlap in those tasks which are performed. For instance, Performing Environmental Systems Functions (Duty O) tasks are performed by virtually all of this group, but this duty takes only 15 percent of their duty time. Typical tasks in Duty O are: Operate Environmental Air Conditioning System (0447) and Monitor Environmental Anti-Ice or Ice Elimination Systems Operations (0438). There is a slight tendency for subgroups to concentrate on certain aspects of the duties. For instance, one subgroup of 10 incumbents emphasized Landing Gear Functions while another subgroup of 20 emphasized Electrical or Instrument Functions. These subgroups were not in unique in the sense that they perform certain tasks not done by other C130 flight engineers. Rather, these subgroups merely indicate slightly different patterns of responding to the survey.

Functional group members who were instructors, evaluators, or supervisors perform those duties in addition to their general flying duties. Examples of tasks performed by this group are: Evaluate Training Effectiveness (C78), Administer Written, Oral, or Performance Tests (D81), and Supervise Apprentice Flight Engineers, AFSC 11330 (B54), As seen in Table 4, however, only a small portion of the C130 functional group are in this job type.

C5/C141 Functional Group

As was the case in the C130 cluster, this group contains personnel who perform general flight engineer tasks, as well as, instructors and evaluators. With the exception of aircraft specific items such as propellors on the C130 and jet power plant operations on the C5/C141 the tasks performed by this group were very similar to those performed by the C130 group. In fact F167 (Compute Aircraft Take-Off and Landing Data) was the number one task on both the C130 and the C5/C141 functional groups. Consequently, the same comments made for the C130 group also apply here. This holds for both the general flying duties and the instructor evaluator duties.

Non-Flying Functional Groups

This small group contains three separate job types. Those instructors assigned to the 3773rd Instructor Squadron at Sheppard AFB grouped together. The main duty was, naturally, Training (Duty D) on which they spent 33 percent of their time. Also grouping together were those members assigned to Command or Staff Supervisor jobs. These members spend a higher than average amount of time on Directing and Implementing (Duty B) tasks and Performing Administrative Functions (Duty E) tasks. Finally, 13 survey members who were assigned to the now disbanded 963 AEQ SQ (EC-121) when the survey was administered grouped together. These members are now in a cross-training status and illustrate the ability of the grouping procedure to cluster survey respondents into meaningful groups.

TABLE 4

PERCENTAGES OF FUNCTIONAL GROUPS AND JOB TYPE GROUPS

		PERCENT
I.	C130 FUNCTIONAL GROUP	
	A. C130 FLIGHT ENGINEER	28%
	B. C130 TRAINING, STAN EVAL, AND INSTRUCTORS	2%
	SUBTOTAL	30%
II.	C5/C141 FUNCTIONAL GROUP	
	A. C5/C141 FLIGHT ENGINEER	48%
	B. C5/C141 TRAINING, STAN EVAL & INSTRUCTORS	9%
	SUBTOTAL	57%
III.	NON-FLYING FUNCTIONAL GROUP	
	A. BASIC COURSE INSTRUCTOR	1%
	B. COMMAND/STAFF SUPERVISOR	2%
	C. EC 121 AEW (DISBANDED)	1%
	SUBTOTAL	4%
	ISOLATES	9%
	TOTAL	100%

DAFSC ANALYSIS

Because of the large number of tasks performed by incumbents in all skill levels and shreds as well as the existence of a core of similar tasks performed by these incumbents, it was decided to compile tables of tasks for each DAFSC level representing usage of 10 percent of available duty time. Further general statements regarding utilization of the most time consuming tasks comprising the first 50 percent of an incumbents duty time have additionally been provided in the narrative.

As shown in Table 5, there were few differences between the A and C shredouts except within the Performing Propellor System Functions (Duty T). Duties involving the greatest time spent across all DAFSC levels are: Performing Environmental System Functions (Duty O), and Performing Aircraft General Functions (Duty K). Participation within Supervisory Duties (Duties A, B, C and D) is uniformly light across all skill levels. This is to be expected although a greater 9-skill level DAFSC participation is generally found in other surveys. The light supervisory participation within the flight engineer career field seems to indicate that 9-skill level DAFSC incumbents are more involved with flying tasks versus ground staff/supervisory responsibilities. Jobs within all the DAFSC levels regardless of shredout are extremely diverse with comparatively little time spent on any one task.

11350A

Within the 11350A DAFSC level, 22 tasks generally involving visual inspections of landing gear systems, monitoring of propellor power plants, electrical and fuel feed systems, and computation of Take-Off and Landing Data (TOLD) data consumed about 10 percent of all duty time. Tasks dealing with visual inspection, operation of systems, performing of operational checks and monitoring of operations comsume at least 50 percent of all duty time. Very little time was spent performing tasks which may be considered maintenance oriented such as these dealing with analysis of malfunctions. (See Table 6).

11370A

Within the 11370A DAFSC skill level there are 26 tasks representing 10 percent of all duty time. These tasks also involve visual inspection of systems, such as, air inlets and flight control systems, monitoring of various aircraft systems, as well as applicable performance checks. Tasks representing 50 percent of all duty time also involve responsibilities of this nature. Very few tasks of a maintenance nature are performed (See Table 7).

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11350A vs 11370A

Tasks differentiating between the 11350A and 11370A DAFSC incumbents are largely of a supervisory nature. More personnel holding the 11370A DAFSC perform tasks such as administer written, oral or performance tests, although these tasks are the ones most clearly differentiating between the skill levels, the percentage of personnel performing the tasks as comparatively low.

11350C

DAFSC 11350C incumbents spent 10 percent of their duty time performing 18 tasks dealing largely with visual inspections of landing gear systems and computation of landing, cruise, and emergency data. Oddly enough, the single tasks showing the greatest amount of time spent is Attend Training, such as, Race Relations or Drug Abuse (Task J262). This seems to additionally substantiate the diverse nature of the 11350C job. As has been found with the A shredout DAFSC incumbents, the amount of time spent on any one particular tasks is low; however, an extremely large percentage of all the tasks within the inventory itself are being performed to some extent (See Table 9).

For DAFSC 11350C incumbents there are 131 tasks performed within the first 50 percent of all duty time. They are likewise operational, involving visual inspections, monitoring of operations, and performing operational checks. Within these tasks, only four seemed maintenance oriented. They were Analyze Aircraft Fuel Feed System Malfunctions (Task J261), Analyze Fuel Feed System Component Malfunctions (Task J261) Analyze Environmental Bleed Air System Malfunctions (Task 0420) and Analyze Environmental Air Conditioning System Malfunctions (Task 0416).

11370C

Performance of 157 tasks largely involving the same operational responsibilities as were found for DAFSC 11350C incumbents comprised 50 percent of all duty time for DAFSC 11370 personnel. There were six tasks which could possible be deemed maintenance oriented. They are: Analyze Environmental Air Conditioning System Malfunctions (Task 0416), Analyze Environmental Bleed Air System Malfunctions (Task 0420), Analyze Environmental Anti-Icing or Ice Elimination System Malfunctions Task (418), Analyze Aircraft Fuel Feed System Malfunctions (Task J262), and Analyze Aircraft Instrument System Malfunctions (Task N389).

Table 10 presents the 25 tasks that occupy 10 percent of all duty time with this particular skill level. As has been found within the 5-skill level shredout tasks are largely operational in nature. Computation of aircraft performance data is accomplished to a slightly greater extent than at the 5-skill level and the essential absence of any maintenance responsibilities is also evident.

11350C vs 11370C

Differences between the 11350C job and the 11370C job center around the participation within supervisory areas. Incumbents in the 11370C DAFSC are more directly involved in supervision especially within (Duty B) Directing and Implementing than incumbents holding the 11350C DAFSC (See Table 11).

11390

Although the 29 tasks typifying the initial 10 percent of duty time of DAFSC 11390 incumbents contain some expected supervision, most of the tasks deal with the same visual inspection, operation, and monitoring responsibilities found within the other DAFSC skill levels. This, of course, further testifies to the highly operational nature of the AFSC in general and the 9-skill level in particular (See Table 12).

11390 vs 11370A/11370C

Differences between the 9-skill level and 11370A incumbents center largely around performance of tasks within the Performing Propellor System Functions (Duty T) (Table 13). As might be expected, 11370A incumbents are involved with these tasks more so then 11390 incumbents. There are, however, two tasks which appear to show a significantly higher performance by 9-skill level incumbents. These tasks are: Perform Operational Check of Wing Spoiler Systems (Task Q542) and Monitor Power Plant Vibration Indicators (Task R598).

Differences between 11390 DAFSC incumbents and 11370C incumbents are largely supervisory even though the tasks involving the greatest amount of time spent are <u>not</u> supervisory (See Table 14). This result highlights the subtle differences between the two DAFSCs; both groups are primarily flight oriented with the 11390 DAFSC incumbents also spending time in supervisory tasks.

SHRED-OUT DIFFERENCES

Differences between the 11350A and 11350C shredouts are shown by the participation within Performing Propellor System Functions (Duty T) by the 11350A incumbents (Table 15). The most representative tasks

performed to a greater extent by 11350C DAFSC incumbents are Perform Operational Check of Wing Spoiler Systems (Task Q542), Monitor Power Plant Vibration Indicators (Task R598), and Record Aircraft Flight Conditions in Engine Vibration Logs (Task F192). With regards to 11370A and 11370C personnel the only task showing greater performance by 11370C DAFSC incumbents (Table 16) was Perform Operational Check of Wing Spoiler Systems (Task Q542).

TABLE 5

PERCENT TIME SPENT ON DUTIES BY INVENTORY SECTION

INVENTORY SECTION	PERCENT TIME SPENT DAFSC 11350A N=115	DAFSC 11370A N=282	DAFSC 11350C N=103	DAFSC 11370C N=656	DAFSC 11390 N=190
A PLANNING AND ORGANIZING	*	1	*	1	3
B DIRECTING AND IMPLEMENTING	1	3	1	3	7
C EVALUATING	1	2	*	1	3
D TRAINING	1	3	2	2	4
E PERFORMING ADMINISTRATIVE FUNCTIONS	2	2	2	2	4
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	7	6	10	9	7
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8	7	8	7	6
H PERFORMING AEROSPACE GROUND EQUIPMENT (AGE) FUNCTIONS	1	1	1	1	1
I PERFORMING AIRCRAFT CARGO DOOR OR RAMP SYSTEM FUNCTIONS	3	30	4	3	3
J PERFORMING AIRCRAFT FUEL SYSTEM FUNCTIONS	5	5	5	5	5
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12	10	11	10	9
L PERFORMING AUXILIARY POWER UNIT (APU) OR GAS TURBINE COMPRESSOR (GTC) FUNCTIONS	3	3	3	3	3
M PERFORMING COMMUNICATIONS AND NAVIGATION EQUIPMENT FUNCTIONS	2	2	2	2	2
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	8	7	7	7	6
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	14	14	16	15	13
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8	8	8	8	8
Q PERFORMING FLIGHT CONTROL SYSTEM FUNCTIONS	3	3	4	4	3
R PERFORMING POWER PLANT FUNCTIONS	8	9	8	9	8
S PERFORMING PNEUDRAULIC OR HYDRAULIC SYSTEM FUNCTIONS	3	3	5	4	4
T PERFORMING PROPELLOR SYSTEM FUNCTIONS	7	6	*	*	2
U PERFORMING MAINTENANCE DATA AND RECORDING (MADAR) FUNCTIONS	*	*	*	1	*
V PERFORMING GENERAL SHOP MAINTENANCE	1	1	1	*	*

* LESS THAN 1 PERCENT

TABLE 6

REPRESENTATIVE TASKS PERFORMED BY DAFSC 11350A

TASK		PERCENT PERFORMING	PERCENT TIME SPENT
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	91	.57
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	95	.56
G224	VISUALLY INSPECT LANDING GEAR EMERGENCY SYSTEMS	88	.55
K337	VISUALLY INSPECT EMERGENCY ESCAPE HATCHES OR LATCHES	97	.53
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	97	.51
K314	VISUALLY INSPECT PANELS, LOCKS OR FASTENERS	94	.48
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	91	.46
F164	COMPUTE AIRCRAFT LANDING DATA	90	.46
G228	VISUALLY INSPECT LANDING GEAR TIRES	94	.44
G223	VISUALLY INSPECT LANDING GEAR DOORS	94	.44
R597	MONITOR POWER PLANT THRUST REVERSING SYSTEM OPERATIONS	40	.43
K332	VISUALLY INSPECT AIR INLETS	95	.42
G229	VISUALLY INSPECT LANDING GEAR WHEEL ASSEMBLES	94	.42
G227	VISUALLY INSPECT LANDING GEAR STEERING SYSTEMS	91	.41
K339	VISUALLY INSPECT FIRE EXTINGUISHERS OR OTHER EMERGENCY EQUIPMENT	94	.41
N393	OPERATE AIRCRAFT ELECTRICAL INTERIOR LIGHTING SYSTEMS	90	.41
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	90	.40
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	90	.40
G222	VISUALLY INSPECT LANDING GEAR CYLINDERS OR SNUBBERS	92	.40
G225	VISUALLY INSPECT LANDING GEAR NORMAL SYSTEMS	89	.40
I251	INSPECT CARGO DOOR OR RAMP HYDRAULIC SYSTEMS FOR LEAKS	92	.40
G221	VISUALLY INSPECT LANDING GEAR BRAKE OR ANTI-SKID SYSTEMS	90	.39

TABLE 7

REPRESENTATIVE TASKS PERFORMED BY DAFSC 11370A

TASK		PERCENT PERFORMING	PERCENT TIME SPENT
K332	VISUALLY INSPECT AIR INLETS	94	.54
N414	VISUALLY INSPECT PILOT PROBES, TEMPERATURE PROBES OR STATIC PORTS OF AIRCRAFT INSTRUMENT SYSTEMS	94	.41
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	97	.40
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEMS OPERATIONS	92	.39
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	94	.38
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	91	.37
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	95	.37
F164	COMPUTE AIRCRAFT LANDING DATA	94	.37
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	93	.35
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	93	.35
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	96	.35
K341	VISUALLY INSPECT PANELS, LOCKS OR FASTENERS	94	.35
Q547	VISUALLY INSPECT PRIMARY FLIGHT CONTROL SYSTEMS	95	.35
G223	VISUALLY INSPECT LANDING GEAR DOORS	97	.34
0447	OPERATE ENVIRONMENTAL AIR CONDITIONING SYSTEMS	91	.34
0446	OPERATE AUTOMATIC ENVIRONMENTAL PRESSURIZING SYSTEMS	90	.34
G221	VISUALLY INSPECT LANDING GEAR BRAKE OR ANTI-SKID SYSTEMS	95	.34
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	95	.34
0442	MONITOR ENVIRONMENTAL PRESSURIZING SYSTEM OPERATIONS FOR DIFFERENTIAL PRESSURE	91	.34
N413	VISUALLY INSPECT AIRCRAFT WIRING, CIRCUIT BREAKERS OR CONTROL PANELS	93	.34
0440	MONITOR ENVIRONMENTAL OVERHEAT/FIRE DETECTION SYSTEMS	89	.34
Q549	VISUALLY INSPECT TRIM TAB SYSTEMS	93	.34
L357	PERFORM GTC BLEED AIR PREFLIGHT CHECKS	90	.34
K333	VISUALLY INSPECT COCKPIT, CABIN COMPARTMENT OR FURNISHINGS	94	.34
K337	VISUALLY INSPECT EMERGENCY ESCAPE HATCHES OR LATCHES	96	.34
G225	VISUALLY INSPECT LANDING GEAR NORMAL SYSTEMS	95	.34

TABLE 8

TASKS WHICH MOST CLEARLY DISTINGUISH DAFSC 11350A SKILL AND 11370A SKILL PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11350A N=115	DAFSC 11370A N=282	DIFFERENCE
D81	ADMINISTIVE WRITTEN, OVAL OR PERFORMANCE TESTS	13	52	-39
B56	SUPERVISE FLIGHT ENGINEER SPECIALISTS (AFSC 11350)	8	45	-37
B54	SUPERVISE APPRENTICE FLIGHT ENGINEERS (AFSC 11330)	15	49	-34
B89	CONDUCT TRANSITION TRAINING	11	44	-33
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS (AFSC 11370)	5	38	-33
D84	CONDUCT JOB PROFICIENCY TRAINING	13	46	-33
C71	EVALUATE JOB PERFORMANCE OF ASSIGNED PERSONNEL	6	37	-31
C78	EVALUATE TRAINING EFFECTIVENESS	6	36	-30
P493	INSTRUCT PERSONNEL ON EMERGENCY PROCEDURES SUCH AS GROUND, INFLIGHT OR ESCAPE	37	66	-29
C70	EVALUATE INDIVIDUALS FOR DOWNGRADING, UPGRADING, RECLASSIFICATION OR SPECIALIZED TRAINING	5	34	-29
A14	PLAN TRAINING REQUIREMENTS	10	38	-28
A10	ESTABLISH OR REVISE LOCAL POLICIES OR PROCEDURES FOR FLIGHT ENGINEER PERSONNEL	4	32	-28
D88	CONDUCT TACTICAL TRAINING	11	39	-28
B47	INTERPRET WIRING OR SCHEMATIC DIAGRAMS	36	63	-27
G213	PERFORM OPERATIONAL CHECK OF EMERGENCY LANDING GEAR EXTENSION SYSTEMS	30	57	-27

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 11350C

TASK		PERCENT PERFORMING	PERCENT TIME SPENT
D83	ATTEND TRAINING SUCH AS RACE RELATIONS OR DRUG ABUSE	75	1.27
G228	VISUALLY INSPECT LANDING GEAR TIRES	93	.67
I254	MONITOR AIRCRAFT CARGO DOOR OR RAMP SYSTEM FUNCTIONS	80	.54
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	91	.53
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	94	.52
F164	COMPUTE AIRCRAFT LANDING DATA	94	.51
F159	COMPUTE AIRCRAFT CRUISE DATA	93	.51
F192	RECORD AIRCRAFT FLIGHT CONDITIONS IN ENGINE VIBRATION LOGS	80	.51
I258	VISUALLY INSPECT AIRCRAFT CARGO DOORS, RAMPS OR LATCHES	92	.49
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	94	.48
R597	MONITOR POWER PLANT THRUST REVERSING SYSTEM OPERATIONS	84	.47
F158	COMPUTE AIRCRAFT CLIMB DATA	92	.47
S639	MONITOR OPERATION OF HYDRAULIC SUCTION BOOST PUMPS	90	.46
F162	COMPUTE AIRCRAFT EMERGENCY DATA	92	.46
G221	VISUALLY INSPECT LANDING GEAR BRAKE OR ANTI-SKID SYSTEMS	87	.46
K310	OPERATE CREW ENTRY DOORS OR RAMPS	89	.45
S641	OPERATE HYDRAULIC SUCTION BOOST PUMPS	91	.45
G223	VISUALLY INSPECT LANDING GEAR DOORS	92	.45

TABLE 10

REPRESENTATIVE TASKS PERFORMED BY DAFSC 11370C

TASK		PERCENT PERFORMING	PERCENT TIME SPENT
R597	MONITOR POWER PLANT THRUST REVERSING SYSTEM OPERATIONS	90	.56
F164	COMPUTE AIRCRAFT LANDING DATA	97	.45
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA	97	.45
F159	COMPUTE AIRCRAFT CRUISE DATA	96	.41
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	92	.41
0446	OPERATE AUTOMATIC ENVIRONMENTAL PRESSURIZING SYSTEMS	92	.40
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	92	.39
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	97	.39
0447	OPERATE ENVIRONMENTAL AIR CONDITIONING SYSTEMS	92	.39
0437	MONITOR ENVIRONMENTAL AIR CONDITIONING SYSTEM FOR PROPER OPERATION	91	.39
F158	COMPUTE AIRCRAFT CLIMB DATA	94	.39
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	91	.39
0442	MONITOR ENVIRONMENTAL PRESSURIZING SYSTEM OPERATIONS FOR DIFFERENTIAL PRESSURE	91	.38
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	92	.38
I258	VISUALLY INSPECT AIRCRAFT CARGO DOORS, RAMPS OR LATCHES	95	.38
0439	MONITOR ENVIRONMENTAL BLEED AIR SYSTEM OPERATIONS	91	.38
S640	MONITOR PNEUDRAULIC OR HYDRAULIC PRESSURE SUPPLY SYSTEM OPERATIONS	90	.38
I252	INSPECT CARGO DOOR OR RAMP LOCKS FOR SECURITY OR CONDITION	95	.38
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEM OPERATIONS	89	.38
S639	MONITOR OPERATION OF HYDRAULIC SUCTION BOOST PUMPS	90	.38
G229	VISUALLY INSPECT LANDING GEAR WHEEL ASSEMBLIES	96	.37
G223	VISUALLY INSPECT LANDING GEAR DOORS	97	.37
G221	VISUALLY INSPECT LANDING GEAR BRAKE OR ANTI-SKID SYSTEMS	96	.37
G228	VISUALLY INSPECT LANDING GEAT TIRES	96	.37
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	95	.37

TABLE 11

TASKS WHICH MOST CLEARLY DISTINGUISH DAFSC 11350C SKILL AND 11370C SKILL PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11350C N=103	DAFSC 11370C N=656	DIFFERENCE
B56	SUPERVISE FLIGHT ENGINEER SPECIALISTS (AFSC 11350)	5	50	-45
B54	SUPERVISE APPRENTICE FLIGHT ENGINEERS	3	46	-43
J280	PERFORM OPERATIONAL CHECK OF AIRCRAFT FUEL DUMP SYSTEMS DURING FUNCTIONAL CHECK FLIGHT (FCF)	8	50	-42
D98	MAINTAIN FLIGHT ENGINEER FORMS (MAC FORM 21)	10	49	-39
B26	DIRECT INFLIGHT INSPECTIONS OF AIRCRAFT	13	50	-37
B62	SUPERVISE REFUELING OR DEFUELING OPERATIONS	23	59	-36
B34	DIRECT PREFLIGHT INSPECTIONS OF AIRCRAFT	25	61	-36
B33	DIRECT POSTFLIGHT INSPECTIONS OF AIRCRAFT	18	54	-36
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS (AFSC 11350)	1	36	-35
D101	MONITOR PROGRESS OF TRAINEES	2	33	-31
B18	ASSIST SUBORDINATES WITH TECHNICAL PROBLEMS	17	48	-31
D81	ADMINISTER WRITTEN, ORAL OR PERFORMANCE TESTS	4	34	-30
D84	CONDUCT JOB PROFICIENCY TRAINING	4	34	-30
J269	DEFUEL AIRCRAFT	23	53	-30
E125	MAINTAIN OR PREPARE USAF INVOICE FORMS (AF FORM 15)	18	47	-29

TABLE 12

REPRESENTATIVE TASKS PERFORMED BY DAFSC 11390

TASK		PERCENT PERFORMING	PERCENT TIME SPENT
B50	PREPARE CORRESPONDENCE OR REPORTS	77	.45
C71	EVALUATE JOB PERFORMANCE OF ASSIGNED PERSONNEL	80	.39
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	96	.38
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS (AFSC 11370)	86	.38
C78	EVALUATE TRAINING EFFECTIVENESS	76	.37
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	95	.35
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	94	.35
E109	COMPILE DATA FOR REPORTS OR STAFF STUDIES	53	.34
B51	REPORT TO UNIT COMMANDER OR STAFF ON STATUS OF FLIGHT ENGINEER ACTIVITIES	78	.34
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEM OPERATIONS	96	.34
F164	COMPUTE AIRCRAFT LANDING DATA	96	.34
D83	ATTEND TRAINING SUCH AS RACE RELATIONS OR DRUG ABUSE	93	.34
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	93	.34
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	92	.33
B56	SUPERVISE FLIGHT ENGINEER SPECIALISTS (AFSC 11350)	79	.33
0446	OPERATE AUTOMATIC ENVIRONMENTAL PRESSURIZING SYSTEMS	96	.33
0442	MONITOR ENVIRONMENTAL PRESSURIZING SYSTEM OPERATIONS FOR DIFFERENTIAL PRESSURE	96	.32
0437	MONITOR ENVIRONMENTAL AIR CONDITIONING SYSTEM FOR PROPER OPERATION	94	.32
F159	COMPUTE AIRCRAFT CRUISE DATA	96	.32
D101	MONITOR PROGRESS OF TRAINEES	73	.32
B59	SUPERVISE INSTRUCTOR FLIGHT ENGINEER TECHNICIANS	72	.32
0447	OPERATE ENVIRONMENTAL AIR CONDITIONING SYSTEMS	93	.32
F158	COMPUTE AIRCRAFT CLIMB DATA	95	.31
0439	MONITOR ENVIRONMENTAL BLEED AIR SYSTEM OPERATIONS	92	.31
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	97	.31
D81	ADMINISTER WRITTEN, ORAL OR PERFORMANCE TESTS	76	.31
I258	VISUALLY INSPECT AIRCRAFT CARGO DOORS, RAMPS OR LATCHES	93	.31
G229	VISUALLY INSPECT LANDING GEAR WHEEL ASSEMBLIES	97	.31
G228	VISUALLY INSPECT LANDING GEAR TIRES	97	.31

TABLE 13

TASKS WHICH MOST CLEARLY DISTINGUISH DAFSC 11370A SKILL AND 11390 SKILL PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11370A N=282	DAFSC 11390 N=190	DIFFERENCE
T668	OPERATE PROPELLOR DE-ICING SYSTEMS IN FLIGHT	94	26	68
T665	MONITOR PROPELLOR NEGATIVE TORQUE SYSTEM INDICATORS	91	24	67
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	93	27	66
T663	MONITOR PROPELLOR DE-ICING SYSTEM OPERATIONS	91	26	65
T664	MONITOR PROPELLOR ICE ELIMINATION LOADMETER OPERATIONS	87	24	63
T669	OPERATE PROPELLOR DE-ICING SYSTEMS ON GROUND	85	23	62
T675	PERFORM OPERATIONAL CHECK OR PROPELLOR SYSTEM CONTROLS SUCH AS FEATHER CONTROLS	88	27	61
T673	PERFORM OPERATIONAL CHECK OF NEGATIVE TORQUE SYSTEMS	81	21	60
J283	POSITION TEMPERATURE DATUM (TD) SYSTEMS	87	28	59
T670	OPERATE PROPELLOR ICE ELIMINATION SYSTEMS IN FLIGHT	81	22	59
L360	PRIME GTC OIL SYSTEMS	80	22	58
T666	MONITOR PROPELLOR PITCH LOCK SYSTEM OPERATIONS	85	27	58
T654	ANALYZE PROPELLOR DE-ICING SYSTEM MALFUNCTIONS	82	25	57
Q542	PERFORM OPERATIONAL CHECK OF WING SPOILER SYSTEMS	3	70	-67
R98	MONITOR POWER PLANT VIBRATION INDICATORS	7	66	-59

TABLE 14

TASKS WHICH MOST CLEARLY DISTINGUISH DAFSC 11370C AND 11390 PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11370C N=656	DAFSC 11390 N=190	DIFFERENCE
B51	REPORT TO UNIT COMMANDER OR STAFF ON STATUS OF FLIGHT ENGINEER ACTIVITIES	15	78	-63
C71	EVALUATE JOB PERFORMANCE OF ASSIGNED PERSONNEL	20	80	-60
A10	ESTABLISH OR REVISE LOCAL POLICIES OR PROCEDURES FOR FLIGHT ENGINEER PERSONNEL	16	75	-59
C67	EVALUATE COMPLAINTS OR SUGGESTIONS	10	67	-57
B59	SUPERVISE INSTRUCTOR FLIGHT ENGINEER TECHNICIANS	17	72	-55
B58	SUPERVISE FLIGHT EXAMINER FLIGHT ENGINEER TECHNICIANS	7	60	-53
C78	EVALUATE TRAINING EFFECTIVENESS	23	76	-53
B44	EDIT CORRESPONDENCE OR REPORTS	10	63	-53
C70	EVALUATE INDIVIDUALS FOR DOWNGRADING, UPGRADING, RECLASSIFICATION, OR SPECIALIZED TRAINING	21	74	-53
B50	PREPARE CORRESPONDENCE OR REPORTS	26	77	-51
B52	RESOLVE UNIT PERSONNEL PROBLEMS	9	59	-50
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS	36	86	-50
D90	COUNSEL PERSONNEL ON JOB OR CAREER PROGRESSION	20	68	-48
D106	SELECT OR ASSIGN INSTRUCTORS, OJT, SUPERVISORS OR TRAINERS	11	57	-46
C68	EVALUATE DISCREPANCIES REPORTED BY CREW MEMBERS	28	74	-46

TABLE 15

TASKS WHICH MOST CLEARLY DISTINGUISH BETWEEN SHREDOUTS AMONG DAFSC 11350A AND DAFSC 11350C PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11350A N=115	DAFSC 11350C N=103	DIFFERENCE
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	91	3	88
T668	OPERATE PROPELLOR DE-ICING SYSTEMS IN FLIGHT	90	3	87
T665	MONITOR PROPELLOR NEGATIVE TORQUE SYSTEM INDICATORS	89	3	86
T663	MONITOR PROPELLOR DE-ICING SYSTEM OPERATIONS	86	3	83
T664	MONITOR PROPELLOR ICE ELIMINATION LOADMETER OPERATIONS	86	3	83
T666	MONITOR PROPELLOR PITCHLOCK SYSTEM OPERATIONS	86	3	83
L359	PERFORM OPERATIONAL CHECK OF GTC	90	10	80
T675	PERFORM OPERATIONAL CHECK OR PROPELLOR SYSTEM CONTROLS SUCH AS FEATHER CONTROLS	83	3	80
T670	OPERATE PROPELLOR ICE ELIMINATION SYSTEMS IN FLIGHT	77	3	74
T654	ANALYZE PROPELLOR DE-ICING SYSTEM MALFUNCTIONS	73	1	72
L362	SERVICE GTC OIL SYSTEMS	75	3	72
J283	POSITION TEMPERATURE DATUM (TD) SYSTEMS	80	10	70
Q542	PERFORM OPERATIONAL CHECK OF WING SPOILER SYSTEMS	3	83	-80
R598	MONITOR POWER PLANT VIBRATION INDICATORS	8	82	-74
F192	RECORD AIRCRAFT FLIGHT CONDITIONS IN ENGINE VIBRATION LOGS	8	80	-72

TABLE 16

TASKS WHICH MOST CLEARLY DISTINGUISH BETWEEN SHREDOUTS AMONG DAFSC 11370A AND DAFSC 11370C PERSONNEL

TASK		PERCENT PERFORMING DAFSC 11370A N=282	DAFSC 11370C N=656	DIFFERENCE
T668	OPERATE PROPELLOR DE-ICING SYSTEMS IN FLIGHT	94	4	90
T665	MONITOR PROPELLOR NEGATIVE TORQUE SYSTEM INDICATORS	91	1	90
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	93	4	89
T663	MONITOR PROPELLOR DE-ICING SYSTEM OPERATIONS	91	3	88
T664	MONITOR PROPELLOR ICE ELIMINATION LOADMETER OPERATIONS	87	1	86
T675	PERFORM OPERATIONAL CHECK OF PROPELLOR SYSTEM CONTROLS SUCH AS FEATHER CONTROLS	88	3	85
T666	MONITOR PROPELLOR PITCHLOCK SYSTEM OPERATIONS	85	3	82
T669	OPERATE PROPELLOR DE-ICING SYSTEMS ON GROUND	85	3	82
J283	POSITION TEMPERATURE DATUM (TD) SYSTEMS	87	6	81
T673	PERFORM OPERATIONAL CHECK OF NEGATIVE TORQUE SYSTEMS	81	1	80
T670	OPERATE PROPELLOR ICE ELIMINATION SYSTEMS IN FLIGHT	81	2	79
L359	PERFORM OPERATIONAL CHECK OF GTC	91	12	79
T654	ANALYZE PROPELLOR DE-ICING SYSTEM MALFUNCTIONS	82	3	79
T658	ANALYZE PROPELLOR NEGATIVE TORQUE SYSTEM COMPONENT MALFUNCTIONS	79	1	78
Q542	PERFORM OPERATIONAL CHECK OF WING SPOILER SYSTEMS	3	91	-88

ANALYSIS OF AFMS GROUPS

Differences in percent time spent on duties in the 113X0 career ladder are similar to those found in most Air Force specialties. In both the 113X0A and the 113X0C ladders supervisory duties take up increasing amounts of job time as the member stays in the career field. There are many duties, however, whose time spent figures remain fairly constant over time. These duties tend to be technical and directly associated with flying. Except for those duties specific to jet or propellor aircraft (e.g., T and U), time spent figures are similar for the two ladders. See Tables 17 and 18.

TABLE 17

PERCENT TIME SPENT IN DUTIES BY MONTHS IN SPECIALTY GROUPS

DUTY	MONTHS IN SPECIALTY (AFS 113X0A) 2-24	25-48	49-96	97-144	145-192	193-240	241+
A ORGANIZING AND PLANNING	*	1	1	1	1	1	3
B DIRECTING AND IMPLEMENTING	2	3	2	4	4	3	8
C EVALUATING	1	1	1	2	2	2	4
D TRAINING	2	2	2	3	3	2	3
E PERFORMING ADMINISTRATIVE FUNCTIONS	2	2	2	3	2	2	3
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	6	6	6	6	6	5	6
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8	7	7	7	8	7	6
H PERFORMING AEROSPACE GROUND EQUIPMENT (AGE) FUNCTIONS	2	1	1	1	1	1	1
I PERFORMING AIRCRAFT CARGO DOOR OR RAMP SYSTEM FUNCTIONS	3	3	3	3	3	4	3
J PERFORMING AIRCRAFT FUEL SYSTEM FUNCTIONS	5	5	5	5	5	5	6
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12	12	11	10	10	10	9
L PERFORMING AUXILIARY POWER UNIT (APU) OR GAS TURBINE (GTC) FUNCTIONS	4	3	3	3	3	3	2
M PERFORMING COMMUNICATIONS AND NAVIGATION EQUIPMENT FUNCTIONS	2	3	2	2	2	2	2
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	8	7	7	7	7	7	7
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	14	13	14	14	13	14	11
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8	7	8	8	8	9	8
Q PERFORMING FLIGHT CONTROL SYSTEM FUNCTIONS	3	4	3	3	3	3	3
R PERFORMING POWER PLANT FUNCTIONS	8	10	8	9	9	10	8
S PERFORMING PNEUDRAULIC OR HYDRAULIC SYSTEM FUNCTIONS	3	3	3	3	3	3	3
T PERFORMING PROPELLOR SYSTEM FUNCTIONS	6	6	6	6	6	7	5
U PERFORMING MAINTENANCE AND DATA RECORDING (MADAR) FUNCTIONS	*	*	*	*	*	*	*
V PERFORMING GENERAL SHOP MAINTENANCE	1	1	1	1	1	*	1

* LESS THAN 1 PERCENT

TABLE 18

PERCENT TIME SPENT ON DUTIES BY INVENTORY SECTION FIRST ASSIGNMENT AND MONTHS DAFSC GROUPS, AFSC 113X0C

DUTY	MONTHS IN SPECIALTY (AFS 113X0A)						
	2-24	25-48	49-96	97-144	145-192	193-240	241+
A ORGANIZING AND PLANNING	*	1	1	1	1	1	2
B DIRECTING AND IMPLEMENTING	1	2	3	4	3	4	5
C EVALUATING	1	1	1	2	1	1	2
D TRAINING	1	2	2	3	2	3	3
E PERFORMING ADMINISTRATIVE FUNCTIONS	2	3	2	3	2	3	3
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	9	9	9	8	8	8	8
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8	7	8	7	7	7	8
H PERFORMING AEROSPACE GROUND EQUIPMENT (AGE) FUNCTIONS	1	1	1	1	1	1	1
I PERFORMING AIRCRAFT CARGO DOOR OR RAMP SYSTEM FUNCTIONS	4	4	4	3	4	3	4
J PERFORMING AIRCRAFT FUEL SYSTEM FUNCTIONS	5	5	6	5	6	5	5
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	11	11	11	10	10	10	10
L PERFORMING AUXILIARY POWER UNIT (APU) OR GAS TURBINE (GTC) FUNCTIONS	3	3	3	3	3	3	3
M PERFORMING COMMUNICATIONS AND NAVIGATION EQUIPMENT FUNCTIONS	2	2	2	2	2	2	2
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	7	7	7	7	7	6	6
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	16	17	15	15	16	13	14
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8	8	8	9	9	9	7
Q PERFORMING FLIGHT CONTROL SYSTEM FUNCTIONS	5	4	4	4	4	4	4
R PERFORMING POWER PLANT FUNCTIONS	9	8	9	9	9	12	10
S PERFORMING PNEUDRAULIC OR HYDRAULIC SYSTEM FUNCTIONS	5	4	5	4	4	4	4
T PERFORMING PROPELLOR SYSTEM FUNCTIONS	*	1	*	*	*	1	1
U PERFORMING MAINTENANCE AND DATA RECORDING (MADAR) FUNCTIONS	1	*	*	1	1	*	*
V PERFORMING GENERAL SHOP MAINTENANCE	1	*	*	*	*	*	*

ANALYSIS OF CONUS/OVERSEAS DIFFERENCES

As has been seen throughout this analysis, differences between CONUS and overseas personnel also tend to cluster around aircraft types. As seen in Table 19, a higher percentage of flight engineers report that they perform propellor tasks. However, only nine percent of the 113X0 career ladder are assigned overseas.

TABLE 19

TASKS MOST CLEARLY DISTINGUISHING CONUS AND OVERSEAS JOBS

TASK		PERCENT PERFORMING CONUS N=1341	OVERSEAS N=97	DIFFERENCE
R598	MONITOR POWER PLANT VIBRATION INDICATORS	62	5	57
L358	PERFORM PREFLIGHT OPERATIONAL CHECK OF APU	70	14	56
T660	ANALYZE PROPELLOR PITCHLOCK SYSTEM MALFUNCTIONS	67	13	54
L365	VISUALLY INSPECT APU OIL SYSTEMS	67	13	53
T658	ANALYZE PROPELLOR NEGATIVE TORQUE SYSTEM MALFUNCTIONS	23	77	-54
T654	ANALYZE PROPELLOR DEICING SYSTEM MALFUNCTIONS	25	79	-54
L357	PERFORM GTC BLEED AIR PREFLIGHT CHECKS	37	92	-55
L360	PRIME GTC OIL SYSTEMS	24	79	-55
T670	OPERATE PROPELLOR ICE ELIMINATION SYSTEMS IN FLIGHT	25	80	-55
J283	POSITION TEMPERATURE DATUM (TD) SYSTEMS	29	85	-56
T666	MONITOR PROPELLOR PITCHLOCK SYSTEM OPERATIONS	27	85	-58
Q542	PERFORM OPERATIONAL CHECK OF WING SPOILER SYSTEMS	65	5	-60
L359	PERFORM PREFLIGHT OPERATIONAL CHECK OF GTC	35	95	-60
T669	OPERATE PROPELLOR DE-ICING SYSTEMS ON GROUND	25	86	-61
T665	MONITOR PROPELLOR NEGATIVE TORQUE SYSTEM INDICATORS	27	89	-62
T675	PERFORM OPERATIONAL CHECK OF PROPELLOR SYSTEM CONTROLS SUCH AS FEATHER CONTROLS	27	90	-63
T663	MONITOR PROPELLOR DE-ICING SYSTEM OPERATIONS	28	91	-63
T664	MONITOR PROPELLOR ICE ELIMINATION LOADMETER OPERATIONS	26	89	-63
T667	MONITOR PROPELLOR SYSTEM OPERATIONS SUCH AS SYNCHRONIZATION	29	93	-64
T668	OPERATE PROPELLOR DE-ICING SYSTEMS IN FLIGHT	29	94	-65

TASK DIFFICULTY

Selected personnel in the 113X0 career ladder rated the 704 tasks contained in the job inventories. Tasks were rated on a 9-point scale from very-much-below average to very-much-above average difficulty. Difficulty was defined as the length of time need to learn to do the task. The sample of returned task difficulty booklets included 37 raters from various commands and locations. Interrater agreement on the difficulty of tasks was .95. Ratings were adjusted so that average difficulty tasks have ratings of 5.00; tasks of more than average difficulty were given higher scores while below average difficulty were given lower scores.

Table 20 lists the most difficult tasks performed by 50 percent or more of DAFSC 113X0A/C personnel. As seen, the analysis tasks seem to be the most difficult job of a flight engineer. Table 21 lists the least difficult tasks performed by 50 percent or more of the career ladder.

TABLE 20

MOST DIFFICULT TASKS PERFORMED BY 50 PERCENT OR MORE OF DAFSC 113X0 PERSONNEL

TASK		TASK DIFFICULTY RATINGS	PERCENT PERFORMING
P512	PRACTICE OR PERFORM AIRCRAFT LOSS OF AC OR DC ELECTRICAL POWER PROCEDURES	6.13	91
0416	ANALYZE ENVIRONMENTAL AIR CONDITIONING SYSTEM MALFUNCTIONS	6.20	87
0420	ANALYZE ENVIRONMENTAL BLEED AIR SYSTEM MALFUNCTIONS	6.09	86
F173	DETERMINE FUEL CONSUMPTION USING TIME, SPEED, DISTANCE FORMULAS, AND CHARTS	6.30	83
P521	RECOMMEND CORRECTIVE ACTION FOR INFLIGHT EMERGENCY CONDITIONS	6.36	79
Q529	ANALYZE PRIMARY FLIGHT CONTROL SYSTEM MALFUNCTIONS	6.55	77
F172	DETERMINE ENGINE POWER REQUIREMENTS USING TIME, SPEED, DISTANCE FORMULAS, AND CHARTS	6.38	76
R567	ANALYZE POWER PLANT FUEL SYSTEM MALFUNCTIONS	6.18	76
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	6.33	75
R569	ANALYZE POWER PLANT IGNITION SYSTEM MALFUNCTIONS	6.09	75
0415	ANALYZE ENVIRONMENTAL AIR CONDITIONING SYSTEM COMPONENT MALFUNCTIONS	6.39	74
Q531	ANALYZE SECONDARY FLIGHT CONTROL SYSTEM MALFUNCTIONS	6.34	70
F169	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS	6.07	68
R566	ANALYZE POWER PLANT FUEL SYSTEM COMPONENT MALFUNCTIONS	6.25	62
Q528	ANALYZE PRIMARY FLIGHT CONTROL SYSTEM COMPONENT MALFUNCTIONS	6.62	61
R568	ANALYZE POWER PLANT IGNITION SYSTEM COMPONENT MALFUNCTIONS	6.13	61
Q530	ANALYZE SECONDARY FLIGHT CONTROL SYSTEM COMPONENT MALFUNCTIONS	6.38	58
M377	OPERATE WEATHER AVOIDANCE RADAR	6.45	57
B47	INTERPRET WIRING OR SCHEMATIC DIAGRAMS	7.03	54
C65	EVALUATE AIRCRAFT PERFORMANCE DATA	6.28	52

TABLE 21

LEAST DIFFICULT TASKS PERFORMED BY 50 PERCENT OR MORE OF DAFSC 113X0 PERSONNEL

TASK		TASK DIFFICULTY RATING	PERCENT PERFORMING
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	2.70	96
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	2.70	94
K331	VISUALLY INSPECT AIRCRAFT TO INSURE PROPER CHOCKING	3.07	91
K305	MAINTAIN REQUIRED HAND TOOLS	3.06	88
K316	OPERATE SEATS, SEAT BELTS, OR SHOULDER HARNESSES	2.82	87
D83	ATTEND TRAINING, SUCH AS, RACE RELATIONS OR DRUG ABUSE	3.50	84
N405	REMOVE OR REPLACE AIRCRAFT ELECTRICAL INTERIOR LIGHTING SYSTEM BULBS	2.98	84
K306	MONITOR BRAKE PRESSURE	3.41	77
K313	OPERATE GALLEY EQUIPMENT SUCH AS OVENS OR COFFEE MAKERS	3.47	76
H233	MONITOR AGE ELECTRICAL POWER CART OPERATIONS	3.42	75
K299	CHOCK AIRCRAFT WHEELS	2.06	73
J286	VISUALLY INSPECT AIRCRAFT FUEL TANK CAP SECURITY	3.40	70
H241	VISUALLY INSPECT AGE ELECTRICAL POWER CARTS FOR PROPER FUEL LEVEL, OIL LEVEL, OR FORM CURRENCY	3.37	65
K325	REMOVE CHOCKS FROM AIRCRAFT LANDING GEAR	2.16	64
K300	CLEAN WORK AREAS	2.14	64
J270	INSPECT FUEL FOR WATER OR OTHER CONTAMINATION	3.47	61
K327	REPLACE OR REINSTALL REMOVABLE DOORS, PANELS, OR ACCESS COVERS	3.37	60
K326	REMOVE OR REPLACE FAIRINGS, COWLINGS, INSPECTION PLATES DOORS, PANELS OR ACCESS COVERS	3.23	58
J268	DRAIN FUEL PUMPS	3.33	54
N404	REMOVE OR REPLACE AIRCRAFT ELECTRICAL EXTERIOR LIGHTING SYSTEM BULBS	3.07	52

COURSE EVALUATION

Job inventory tasks were compared with the 113X0C STS dated 6 October 1976, and POI 3ALR11350C dated 7 January 1976. Actual aircraft proficiency training for the 113X0C AFSC is conducted by MAC at Altus AFB, OK, although training necessary for acquisition of the "C" shredout is currently conducted at Sheppard AFB, TX. Of the 35 sections within the 113X0C STS, only nine sections involve task knowledge/performance training provided by Sheppard.

Training managers should seriously consider consolidating all "C" shredout training at Altus AFB due to the aircraft availability and the capability of hands on training not presently found at Sheppard. Of the tasks referenced in Table 22, Altus already conducts training in their performance with the exception of Construct Cruise Control or Aircraft Performance Charts (Task F171) and Compute Aircraft Weight and Balance Data Using Charts and Portable Computers (Task F170). With respect to these tasks, there exists no operational necessity for the construction of the charts referenced by Task F171 due to their inclusion in the T.O. 1-1 series. With respect to Task 170 instruction in the use of portable computers, such as slide rules or load adjusters, could easily be included in the present training if deemed necessary.

Only Compute Aircraft Inflight Refueling Data (Task F163) was found which did not appear to justify training in terms of the percent members performing. Only eight percent of incumbents in the first job category perform this task.

Training for the 113X0A AFSC is conducted solely by MAC at Little Rock AFB. A general comparison was made between the job inventory tasks and the 113X0A STS, dated 22 April 1975, and the CCD C-130EP01FR, dated 3 May 1976. Training generally supported the tasks performed by 113X0A personnel. However, as will be discussed in the section on Write-In Comments, there does appear to be a discrepancy between the training received by 113X0A personnel and that received by 113X0C personnel.

TABLE 22

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

	TASK	PERCENT PERFORMING
	- SECTION II-7, 13 HOURS -	
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION II-8, 3 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F164	COMPUTE AIRCRAFT LANDING DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F165	COMPUTE AIRCRAFT AIRCRAFT MAXIMUM ENDURANCE AND HOLDING DATA	92
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F157	COMPUTE AIRCRAFT AIRDROP DATA	56
F166	COMPUTE AIRCRAFT SPECIAL MISSION DATA	42

	TASK	PERCENT PERFORMING
	- SECTION II-9, 6 HOURS -	
F169	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS	67
F170	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS AND PORTABLE COMPUTERS	36

	TASK	PERCENT PERFORMING
	- SECTION II-10, 16 HOURS -	
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	90
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	89
F169	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS	67
F146	ADVISE PILOT OF AIRCRAFT WEIGHT AND BALANCE STATUS	60
F170	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS AND PORTABLE COMPUTERS	36

TABLE 22
(CONTINUED)

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

	TASK	PERCENT PERFORMING
	- SECTION III-1(A & B), 4 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F164	COMPUTE AIRCRAFT LANDING DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F165	COMPUTE AIRCRAFT MAXIMUM ENDURANCE AND HOLDING DATA	92
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F166	COMPUTE AIRCRAFT SPECIAL MISSION DATA	42
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION III-2(A & B), 4 HOURS -	
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION III-5A & B, 8 HOURS -	
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA	90
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36
F170	COMPUTE AIRCRAFT WEIGHT AND BALANCE DATA USING CHARTS AND PORTABLE COMPUTERS	36

	TASK	PERCENT PERFORMING
	- SECTION III-8(A & B), 24 HOURS -	
F167	COMPUTE AIRCRAFT CRUISE DATA	90
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

TABLE 22
(CONTINUED)

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

	TASK	PERCENT PERFORMING
	- SECTION III-10, 9 HOURS -	
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION IV-2, 5 HOURS -	
F159	COMPUTE AIRCRAFT CRUISE DATA	93

	TASK	PERCENT PERFORMING
	- SECTION IV-3, 16 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F164	COMPUTE AIRCRAFT LANDING DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F165	COMPUTE AIRCRAFT MAXIMUM ENDURANCE AND HOLDING DATA	92
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F157	COMPUTE AIRCRAFT AIRDROP DATA	56
F174	DETERMINE FUEL REQUIRED FOR FLIGHTS	51
F166	COMPUTE AIRCRAFT SPECIAL MISSION DATA	42
F176	DETERMINE TIME REQUIRED FOR FLIGHTS	38
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION IV-7, 8 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F164	COMPUTE AIRCRAFT LANDING DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F165	COMPUTE AIRCRAFT MAXIMUM ENDURANCE AND HOLDING DATA	92
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F166	COMPUTE AIRCRAFT SPECIAL MISSION DATA	42
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

TABLE 22
(CONTINUED)

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

	TASK	PERCENT PERFORMING
	- SECTION IV-7, 8 HOURS -	
F161	COMPUTE AIRCRAFT DESCENT DATA	89

	TASK	PERCENT PERFORMING
	- SECTION IV-1(A), 24 HOURS -	
F164	COMPUTE AIRCRAFT LANDING DATA	93
F171	CONSTRUCT CRUISE CONTROL OR AIRCRAFT PERFORMANCE CHARTS	36

	TASK	PERCENT PERFORMING
	- SECTION V-1, 8 HOURS -	
F164	COMPUTE AIRCRAFT LANDING DATA	93
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90

	TASK	PERCENT PERFORMING
	- SECTION V-2, 9 HOURS -	
F164	COMPUTE AIRCRAFT LANDING DATA	93
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F175	DETERMINE PAYLOAD OR OFFLOAD FOR FLIGHTS	36

	TASK	PERCENT PERFORMING
	- SECTION V-3 (A & B), 13 HOURS -	
F164	COMPUTE AIRCRAFT LANDING DATA	93
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F175	DETERMINE PAYLOAD OR OFFLOAD FOR FLIGHTS	36

TABLE 22
(CONTINUED)

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

TASK		PERCENT PERFORMING
	- SECTION V-4, 2 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F164	COMPUTE AIRCRAFT LANDING DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F165	COMPUTE AIRCRAFT MAXIMUM ENDURANCE AND HOLDING DATA	92
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	90
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F157	COMPUTE AIRCRAFT AIRDROP DATA	56
F166	COMPUTE AIRCRAFT SPECIAL MISSION DATA	42

TASK		PERCENT PERFORMING
	- SECTION V-7(A, B AND C), 16 HOURS -	
F164	COMPUTE AIRCRAFT LANDING DATA	93
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F159	COMPUTE AIRCRAFT CRUISE DATA	92
F161	COMPUTE AIRCRAFT DESCENT DATA	89
F191	RECORD AIRCRAFT FLIGHT CONDITIONS IN AIRCRAFT PERFORMANCE LOGS	63
F174	DETERMINE FUEL REQUIRED FOR FLIGHTS	51

TASK		PERCENT PERFORMING
	- SECTION V-7(A), 14 HOURS -	
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92

TASK		PERCENT PERFORMING
	- SECTION V-7(A, B), 14 HOURS -	
F162	COMPUTE AIRCRAFT EMERGENCY DATA	95
F159	COMPUTE AIRCRAFT CRUISE DATA	93
F158	COMPUTE AIRCRAFT CLIMB DATA	92
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F174	DETERMINE FUEL REQUIRED FOR FLIGHTS	51
F176	DETERMINE TIME REQUIRED FOR FLIGHTS	38

TABLE 22
(CONTINUED)

PERFORMANCE OF TASKS FOR WHICH TRAINING IS PROVIDED IN COURSE 3ALR11350C

	TASK	PERCENT PERFORMING
	- SECTION V-8, 6 HOURS -	
F160	COMPUTE AIRCRAFT DATA FOR NONSTANDARD CONFIGURATIONS	75
F191	RECORD AIRCRAFT FLIGHT CONDITIONS IN AIRCRAFT PERFORMANCE LOGS	63
F189	MONITOR AIRCRAFT FUEL LOGS	55
F187	MAINTAIN INDIVIDUAL AIRCRAFT USAGE LOGS	47

	TASK	PERCENT PERFORMING
	- SECTION V-9(A,B), 5 HOURS -	
F175	DETERMINE PAYLOAD OR OFFLOAD FOR FLIGHTS	36

WRITE-IN COMMENTS

A large percentage of the write-in comments addressed the issue of inadequate training for 113X0A personnel. Specifically, they mentioned the use of the IC-130B-1-1. A check with the C130 MAC school at Little Rock AFB revealed that 113X0As receive 32 days of training of which 12 are devoted to academics, 10 to simulation, and 10 to flying. During their 32 days of training students receive only minimal amounts of training in weight and balance performance and in the use of the 1-1. On the other hand, 113X0Cs receive from 90 to 100 days of training at the ATC school at Sheppard AFB and at the MAC school at Altus AFB.

The minimal amount of training at the Little Rock AFB school has several implications. First, since it was noted on the write-in comments the issue must be of concern to the force. Second, it might reflect on SKT scores; minimal training can lead to lower scores. This, of course, would impact on promotions. These write-ins also raise the question of whether or not 113X0As feel that they are adequately qualified to serve as flight engineers upon leaving their school.

CONCLUSIONS

1. All 113X0 personnel perform similar tasks with variations occuring primarily in aircraft. The present A and C shredouts adequately classify the career field, and the 113X0 career ladder is properly described in AFM 39-1.

2. There appears to be overlap in training for the 113X0C shredout. It might be more effective to combine all of the 113X0C training at Altus AFB where a portion of the training is now provided and aircraft are avaiable for hands-on-training.

3. Presently, 113X0A flight engineers receive only minimal training in weight and balance, performance, and, in general, the use of the IC-130B-1-1. The MAC school for 113X0As should be expanded to provide more training in the areas and to make the training for the two shredouts more comparable.

APPENDIX A

THE FOLLOWING GROUPS GAVE SLIGHTLY DIFFERENT PATTERNS OF RESPONSES TO THE JOB INVENTORY, BUT THEY ALL BECAME PART OF THE C130 FLIGHT ENGINEER JOB TYPE.

GROUP ID NUMBER AND TITLE: GRP402, C130 FLIGHT ENGINEER

PERCENT OF SAMPLE: 15%

DAFSC DISTRIBUTION: 11330 (2%), 11350 (20%), 11370 (67%), 11390 (9%)
NO RESPONSE (2%)

AVERAGE GRADE: 6.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	14
R PERFORMING POWER PLANT FUNCTIONS	10
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	10
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
G228	VISUALLY INSPECT LANDING GEAR TIRES	100
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	99
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	98
F164	COMPUTE AIRCRAFT LANDING DATA	97

GROUP ID NUMBER AND TITLE: GRP129, C130 FLIGHT ENGINEER

PERCENT OF SAMPLE: 11%

DAFSC DISTRIBUTION: 11330 (4%), 11350 (33%), 11370 (56%), 11390 (3%), NO RESPONSE (4%)

AVERAGE GRADE: 5.6

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENTLY

PERCEIVED UTILIZATION OF TRAINING: EXCELLENTLY

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	15
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	8
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	99
0446	OPERATE AUTOMATIC ENVIRONMENTAL PRESSURIZING SYSTEMS	98
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	96
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEM OPERATIONS	96
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	95

GROUP ID NUMBER AND TITLE: GRP045, C130 FLIGHT ENGINEER

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11330 (15%), 11350 (35%), 11370 (45%), 11390 (5%)

AVERAGE GRADE: 5.9

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	16
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	11
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	9
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	100
N395	OPERATE AIRCRAFT EXTERIOR ELECTRICAL LIGHTING SYSTEMS	100
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEM OPERATIONS	95
L357	PERFORM GTC BLEED AIR PRE-FLIGHT CHECKS	95
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	95

GROUP ID NUMBER AND TITLE: GRP294, C130 FLIGHT ENGINEER

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11330 (20%), 11350 (30%), 11370 (50%)

AVERAGE GRADE: 5.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	16
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12
R PERFORMING POWER PLANT FUNCTIONS	10
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	10
T PERFORMING PROPELLOR SYSTEM FUNCTIONS	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
G229	VISUALLY INSPECT LANDING GEAR WHEEL ASSEMBLIES	100
G228	VISUALLY INSPECT LANDING GEAR TIRES	100
L359	PERFORM PREFLIGHT OPERATIONAL CHECK OF GTC	100
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	100
K341	VISUALLY INSPECT PANELS, LOCKS OR FASTENERS	100

THE FOLLOWING GROUPS GAVE SLIGHTLY DIFFERENT PATTERNS OF RESPONSES TO THE JOB INVENTORY, BUT THEY ALL BECAME PART OF THE C130 TRAINING/EVALUATION JOB TYPE.

GROUP ID NUMBER AND TITLE: GRP219, C130 TRAINING/EVALUATION

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11370 (50%), 11390 (42%), NO RESPONSE (8%)

AVERAGE GRADE: 7.3

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	13
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	8
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	7
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7
T PERFORMING PROPELLOR SYSTEM FUNCTIONS	7
B DIRECTING AND IMPLEMENTING	7
J PERFORMING AIRCRAFT FUEL SYSTEM FUNCTIONS	6

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
B59	SUPERVISE INSTRUCTOR FLIGHT ENGINEER TECHNICIANS	100
D81	ADMINISTER WRITTEN, ORAL OR PERFORMANCE TESTS	100
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS (AFSC 43570)	92
B56	SUPERVISE FLIGHT ENGINEER SPECIALISTS (AFSC 43550)	92
D88	CONDUCT TACTICAL TRAINING	92

GROUP ID NUMBER AND TITLE: GRP138, C130 TRAINING/EVALUATION

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11370 (50%), 11390 (50%)

AVERAGE GRADE: 7.3

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	11
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	11
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	9
D TRAINING	8
B DIRECTING AND IMPLEMENTING	7
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
C78	EVALUATE TRAINING EFFECTIVENESS	100
P521	RECOMMEND CORRECTIVE ACTION FOR INFLIGHT EMERGENCY CONDITIONS	100
P520	RECOMMEND CORRECTIVE ACTION FOR GROUND EMERGENCY CONDITIONS	100
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	100
D108	SUPERVISE TRAINING PROGRAMS OTHER THAN OJT	88

THE FOLLOWING GROUPS GAVE SLIGHTLY DIFFERENT PATTERNS OF RESPONSES TO THE JOB INVENTORY, BUT THEY ALL BECAME PART OF THE C5/C141 FLIGHT ENGINEER JOB TYPE.

GROUP ID NUMBER AND TITLE: GRP396, C141/C5 FLIGHT ENGINEER

PERCENT OF SAMPLE: 32%

DAFSC DISTRIBUTION: 11350 (9%), 11370 (75%), 11390 (15%), NO RESPONSE (1%)

AVERAGE GRADE: 6.5

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY		AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O	PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	16
K	PERFORMING AIRCRAFT GENERAL FUNCTIONS	10
R	PERFORMING POWER PLANT FUNCTIONS	10
P	PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8
F	COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	99
F164	COMPUTE AIRCRAFT LANDING DATA	99
I258	VISUALLY INSPECT AIRCRAFT CARGO DOORS, RAMPS OR LATCHES	99
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	97
N394	OPERATE AIRCRAFT ELECTRICAL SYSTEMS DURING FLIGHT	97

GROUP ID NUMBER AND TITLE: GRP233, C141/C5 FLIGHT ENGINEER

PERCENT OF SAMPLE: 11%

DAFSC DISTRIBUTION: 11350 (18%), 11370 (76%), 11390 (3%), NO RESPONSE (3%)

AVERAGE GRADE: 6.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	17
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	9
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	7
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
0439	MONITOR ENVIRONMENTAL BLEED AIR SYSTEM OPERATIONS	99
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	98
F159	COMPUTE AIRCRAFT CRUISE DATA	98
F164	COMPUTE AIRCRAFT LANDING DATA	98
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	97

GROUP ID NUMBER AND TITLE: GRP074, C141 FLIGHT ENGINEER

PERCENT OF SAMPLE: 3%

DAFSC DISTRIBUTION: 11350 (23%), 11370 (69%), 11390 (3%), NO RESPONSE (6%)

AVERAGE GRADE: 5.9

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	14
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	11
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	11
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	10
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	9

FIVE REPRESENTATIVE TASKS:

TASK	PERCENT MEMBERS PERFORMING
F167 COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	100
F164 COMPUTE AIRCRAFT LANDING DATA	97
G220 VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	97
G223 VISUALLY INSPECT LANDING GEAR DOORS	97
F159 COMPUTE AIRCRAFT CRUISE DATA	95

GROUP ID NUMBER AND TITLE: GRP225, C5 TRAINING/EVALUATION

PERCENT OF SAMPLE: 2%

DAFSC DISTRIBUTION: 11350 (11%), 11370 (89%)

AVERAGE GRADE: 6.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	17
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	12
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	9
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	9
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
U690	OPERATE MADAR	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	100
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	100
U689	MONITOR MADAR OPERATIONS	100
0442	MONITOR ENVIRONMENTAL PRESSURIZING SYSTEM OPERATIONS FOR DIFFERENTIAL PRESSURE	100

GROUP ID NUMBER AND TITLE: GRP305, C5 FLIGHT ENGINEER

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11370 (50%), 11390 (44%), NO RESPONSE (6%)

AVERAGE GRADE: 7.25

EXPRESSED JOB INTEREST: EXTREMELY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	17
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	10
R PERFORMING POWER PLANT FUNCTIONS	9
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	7
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
U689	MONITOR MADAR OPERATIONS	100
U690	OPERATE MADAR	100
U688	ANALYZE MADAR SYSTEM MALFUNCTIONS	100
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	100
U691	PERFORM MADAR PRE-FLIGHT OPERATIONAL CHECKS	94

GROUP ID NUMBER AND TITLE: GRP094, C141 FLIGHT ENGINEER

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11370 (83%), NO RESPONSE (17%)

AVERAGE GRADE: 7.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	19
R PERFORMING POWER PLANT FUNCTIONS	11
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	9
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8
N PERFORMING ELECTRICAL OR INSTRUMENT SYSTEM FUNCTIONS	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
0442	MONITOR ENVIRONMENTAL PRESSURIZING SYSTEM OPERATIONS FOR DIFFERENTIAL PRESSURE	100
R595	MONITOR POWER PLANT FUEL SYSTEM SUPPLY PRESSURE, TEMPERATURE, FLOW OR PUMP OPERATIONS	100
J272	MONITOR AIRCRAFT FUEL FEED SYSTEMS FOR PROPER FEED OR WING BALANCE	100
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	100
0439	MONITOR ENVIRONMENTAL BLEED AIR SYSTEM OPERATIONS	100

GROUP ID NUMBER AND TITLE: GRP297, C141 FLIGHT ENGINEER

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11390 (100%)

AVERAGE GRADE: 6.6

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	15
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	11
R PERFORMING POWER PLANT FUNCTIONS	10
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	10
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
E123	MAINTAIN MISCELLANEOUS AIRCRAFT LOGS OR RECORDS	100
P515	PRACTICE OR PERFORM AIRCRAFT RAPID DEPRESSURIZATION EMERGENCY PROCEDURES	100
B62	SUPERVISE REFUELING OR DEFUELING OPERATIONS	100
B60	SUPERVISE MAINTENANCE OR REPAIR OF AIRCRAFT	80
B34	DIRECT PREFLIGHT INSPECTIONS OF AIRCRAFT	80

THE FOLLOWING GROUPS GAVE SLIGHTLY DIFFERENT PATTERNS OF RESPONSES TO THE JOB INVENTORY, BUT THEY ALL BECAME PART OF THE C5/C141 TRAINING/EVALUATION JOB TYPE.

GROUP ID NUMBER AND TITLE: GRP314, C141 TRAINING/EVALUATION

PERCENT OF SAMPLE: 3%

DAFSC DISTRIBUTION: 11370 (71%), 11390 (29%)

AVERAGE GRADE: 7.1

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	12
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	10
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	10
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	9
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7
R PERFORMING POWER PLANT FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
F164	COMPUTE AIRCRAFT LANDING DATA	100
G219	VERIFY LANDING GEAR SAFETY PINS ARE REMOVED PRIOR TO FLIGHTS	100
G220	VERIFY LANDING GEAR SAFETY PINS ARE INSTALLED AFTER FLIGHTS	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	97
0447	OPERATE ENVIRONMENTAL AIR CONDITIONING SYSTEMS	97

GROUP ID NUMBER AND TITLE: GRP249, C141/C5 TRAINING/EVALUATING

PERCENT OF SAMPLE: 2%

DAFSC DISTRIBUTION: 11350 (5%), 11370 (82%), 11390 (9%), NO RESPONSE (40%)

AVERAGE GRADE: 6.6

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY		AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O	PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	16
R	PERFORMING POWER PLANT FUNCTIONS	10
F	COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	9
K	PERFORMING AIRCRAFT GENERAL FUNCTIONS	8
P	PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	8

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
N391	MONITOR AIRCRAFT ELECTRICAL SYSTEM OPERATIONS	100
0437	MONITOR ENVIRONMENTAL AIR CONDITIONING SYSTEM FOR PROPER OPERATION	100
0439	MONITOR ENVIRONMENTAL BLEED AIR SYSTEM OPERATIONS	100
0446	OPERATE AUTOMATIC ENVIRONMENTAL PRESSURIZING SYSTEMS	100
N392	MONITOR AIRCRAFT INSTRUMENT SYSTEM OPERATIONS	95

GROUP ID NUMBER AND TITLE: GRP192, C141 TRAINING/EVALUATION

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11370 (32%), 11390 (68%)

AVERAGE GRADE: 7.9

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	11
B DIRECTING AND IMPLEMENTING	10
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	8
D TRAINING	8
P PERFORMING GROUND OR INFLIGHT EMERGENCY	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
D101	MONITOR PROGRESS OF TRAINEES	100
B57	SUPERVISE FLIGHT ENGINEER TECHNICIANS (AFSC 43570)	100
B59	SUPERVISE INSTRUCTOR FLIGHT ENGINEER TECHNICIANS	100
C71	EVALUATE JOB PERFORMANCE OF ASSIGNED PERSONNEL	95
C78	EVALUATE TRAINING EFFECTIVENESS	90

GROUP ID NUMBER AND TITLE: GRP095, C141 TRAINING/EVALUATION

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11370 (37%), 11390 (63%)

AVERAGE GRADE: 7.5

EXPRESSED JOB INTEREST: EXTREMELY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	12
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	11
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	10
B DIRECTING AND IMPLEMENTING	8
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	7
G PERFORMING LANDING GEAR SYSTEM	6

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
C78	EVALUATE TRAINING EFFECTIVENESS	100
C70	EVALUATE INDIVIDUALS FOR DOWNGRADING, UPGRADING, RECLASSIFICATION OR SPECIALIZED TRAINING	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	100
F164	COMPUTE AIRCRAFT LANDING DATA	100
C71	EVALUATE JOB PERFORMANCE OF ASSIGNED PERSONNEL	88

GROUP ID NUMER AND TITLE: GRP187, C5 TRAINING/EVALUATION

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11370 (68%), 11390 (33%)

AVEPAGE GRADE: 7.0

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	12
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	11
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	9
B DIRECTING AND IMPLEMENTING	8
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	7
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	100
B54	SUPERVISE APPRENTICE FLIGHT ENGINEERS (AFSC 43530)	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	100
C65	EVALUATE AIRCRAFT PERFORMANCE DATA	100
R597	MONITOR POWER PLANT THRUST REVERSING SYSTEM OPERATIONS	100

GROUP ID NUMBER AND TITLE: GRP189, C141 TRAINING/EVALUATION

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11350 (22%), 11370 (67%), 11390 (11%)

AVERAGE GRADE: 6.3

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENT

PERCEIVED UTILIZATION OF TRAINING: EXCELLENT

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	15
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	11
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	10
G PERFORMING LANDING GEAR SYSTEM FUNCTIONS	8
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
F164	COMPUTE AIRCRAFT LANDING DATA	100
F167	COMPUTE AIRCRAFT TAKE-OFF AND LANDING DATA (TOLD)	100
J276	OPERATE AIRCRAFT FUEL FEED SYSTEMS	100
F158	COMPUTE AIRCRAFT CLIMB DATA	100
F159	COMPUTE AIRCRAFT CRUISE DATA	100

GROUP 024 IS THE ONLY GROUP TO FALL INTO THE BASIC COURSE INSTRUCTOR CLUSTER.

GROUP ID NUMBER AND TITLE: GRP024, ATC COURSE INSTRUCTORS

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

DAFSC DISTRIBUTION: 11350 (17%), 11370 (68%), 11390 (16%)

AVERAGE GRADE: 6.5

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: FAIRLY WELL

PERCEIVED UTILIZATION OF TRAINING: FAIRLY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
D TRAINING	33
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	24

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
D82	ARRANGE FOR TRAINING AIDS, SPACE, OR EQUIPMENT	92
A14	PLAN TRAINING REQUIREMENTS	92
D104	PREPARE LESSON PLANS	83
D105	PREPARE WRITTEN EXAMINATIONS	75
D92	DEVELOP COURSE PLANS OF INSTRUCTIONS (POI) OR SPECIALTY TRAINING STANDARDS (STS)	68

THE FOLLOWING GROUPS GAVE SLIGHTLY DIFFERENT PATTERNS OF RESPONSES TO THE JOB INVENTORY, BUT THEY ALL BECAME PART OF THE COMMAND/STAFF SUPERVISOR JOB TYPE.

GROUP ID NUMBER AND TITLE: GRP090, COMMAND/STAFF SUPERVISOR

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11370 (20%), 11390 (79%)

AVERAGE GRADE: 7.7

EXPRESSED JOB INTEREST: EXTREMELY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: EXCELLENTLY

PERCEIVED UTILIZATION OF TRAINING: EXCELLENTLY

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
B DIRECTING AND IMPLEMENTING	11
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	10
R PERFORMING POWER PLANT FUNCTIONS	9
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8
P PERFORMING GROUND OR INFLIGHT EMERGENCY PROCEDURE FUNCTIONS	7
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	6

FIVE REPRESENTATIVE TASKS:

TASK	PERCENT MEMBERS PERFORMING
A10 ESTABLISH OR REVISE LOCAL POLICIES OR PROCEDURES FOR FLIGHT ENGINEER PERSONNEL	100
C65 EVALUATE AIRCRAFT PERFORMANCE DATA	93
B50 PREPARE CORRESPONDENCE OR REPORTS	86
B58 SUPERVISE FLIGHT EXAMINER FLIGHT ENGINEER TECHNICIANS	71
C78 EVALUATE TRAINING EFFECTIVENESS	71

GROUP ID NUMBER AND TITLE: GRP207, COMMAND/STAFF SUPERVISORS

PERCENT OF SAMPLE: 1%

DAFSC DISTRIBUTION: 11370 (50%), 11390 (50%)

AVERAGE GRADE: 7.1

EXPRESSED JOB INTEREST: VERY INTERESTING

PERCEIVED UTILIZATION OF TALENTS: VERY WELL

PERCEIVED UTILIZATION OF TRAINING: VERY WELL

TIME SPENT ON DUTIES:

DUTY	AVERAGE PERCENT TIME SPENT BY ALL MEMBERS
R PERFORMING POWER PLANT FUNCTIONS	12
O PERFORMING ENVIRONMENTAL SYSTEM FUNCTIONS	11
K PERFORMING AIRCRAFT GENERAL FUNCTIONS	9
F COMPUTING AIRCRAFT WEIGHT, BALANCE AND PERFORMANCE DATA	8
B DIRECTING AND IMPLEMENTING	7
P PERFORMING GROUND OR INFLIGHT EMERGENCY	7

FIVE REPRESENTATIVE TASKS:

TASK		PERCENT MEMBERS PERFORMING
D101	MONITOR PROGRESS OF TRAINEES	93
B34	DIRECT PREFLIGHT INSPECTIONS OF AIRCRAFT	93
B51	REPORT TO UNIT COMMANDER OR STAFF ON STATUS OF FLIGHT ENGINEER ACTIVITIES	79
B50	PREPARE CORRESPONDENCE OR REPORTS	71
E109	COMPILE DATA FOR REPORTS OR STAFF STUDIES	57